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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,776	08/09/1999	TATSUYA KUBOTA	450108-4457	8487
20999	7590	01/05/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			CALLAHAN, PAUL E	
			ART UNIT	PAPER NUMBER
			2137	
DATE MAILED: 01/05/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/370,776

Applicant(s)

KUBOTA ET AL.

Examiner

Paul Callahan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-7,120,121 and 123 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,120,121 and 123 is/are rejected.
- 7) ☐ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8-27-2004 has been entered.

2. Claims 1, 4-7, 120, 121, and 123 are pending in this application and have been examined.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1 and 120 have been considered but are moot in view of the new ground(s) of rejection. The additional features added by the latest amendment are addressed in the rejections of the claims infra.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-6, 120, 121, and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurihara (6,069,956) in view of Yanagidaira et al. (5,367,269), and Legall et al. 5,929,916.

As for claims 1, 4, 120, and 121, Kurihara teaches a data multiplexing device which multiplexes a plurality of data elements (abstract), each data element comprising at least a portion of a data program to be output at a receiving device (col. Lines 7-27), which transmits said multiplexed data elements as a transport stream (fig. 1: Encrypted Data Stream), comprising; a scramble key generation means for generating a plurality of scramble keys (fig. 2 item 21), where each scramble key is updated at periodic intervals (col. 7 lines 63-64). Kurihara teaches a data reception device receiving a transport data stream including multiplexed data (fig. 18, item 50), a scramble key extract means for extracting from multiplexed data a plurality of scramble keys and a descramble means for selectively descrambling the transport data stream (fig. 18 items 51, 52), and

Yanagidaira teaches those features that Kurihara fails to teach, namely the use of different scramble keys to scramble different parts of the program where the different scrambled parts are output substantially simultaneously (col. 7 lines 18-22). Yanagidaira teaches scrambling audio data with a first oscillator and video data with a different oscillator. Yanagidaira notes that this technique eliminates blank intervals in the transmitted data stream. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature of Yanagidaira into the

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system of Kurihara. It would have been desirable to do so as this would increase the security of the transmitted data stream by forcing an unauthorized user to break at least two separate encryption keys in order to utilize the data.

The combination of Kurihara and Yanagidaira does not teach the additional feature of an encoder controlling means for assigning a different encoding bit rate to each of a plurality of encoders when encoding each of the plurality of data elements based on the complexity of the plurality of data elements. However Legall does teach this feature (abstract, col. 14 lines 35-42). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Kurihara and Yanagidaira. It would have been desirable to do so as this would allow for the encoder to produce a constant quality level of output over time, unlike the compromises necessitated by constant bit rate encoding. Support for making this combination is found for example, in col. 1 lines 60-67 of the Kurihara '956 Patent where Kurihara discusses the problem of data overflow.

As for claim 5, Kurihara teaches a scramble means that searches for each scramble key by the use of a correspondence table that shows packet identification codes for each of said data elements and their corresponding scramble keys (fig. 1 item 15, col. 5 lines 37-43).

As for claim 6, Kurihara teaches a first encryption means for enciphering a scramble key that is then multiplexed with the data elements (col. 10 lines 28-29).

As for claim 123, Kurihara teaches program data that is video data, main audio data, sub audio data, and private data in col. 16 lines 10-20.

***Allowable Subject Matter***

6. Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent documents teach systems for scrambling and multiplexing data streams similar to that of the applicant:

Blawat et al.           6,198,878

Boice et al.           6,097,757

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Caldwell, can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is: (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or

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proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

12/20/04

Paul Callahan

Andrew Caldwell

ANDREW CALDWELL  
SUPERVISORY PATENT EXAMINER